







SUMMARY REPORT

Pathway to Zero Greenhouse Gas Emissions for Cooling

<u>Video Recording</u>: https://www.youtube.com/watch?v=WLIMOFVAe2l&t=6s

A Brief history of the Cool Coalition

Launched at the First Global Conference on Synergies between the 2030 Agenda and Paris Agreement, the Cool Coalition is a global multi-stakeholder network that connects a wide range of key actors from government, cities, international organizations, businesses, finance, academia, and civil society groups to facilitate knowledge exchange, advocacy and joint action towards a rapid global transition to sustainable cooling. In September 2019, the Cool Coalition became one of the official outcomes and "Transformation Initiatives" put forward by the Executive Office of the Secretary-General for the UN Climate Action Summit in New York.

Context of the Session

A new and exciting project examining the pathway to zero GHG emissions for the cooling sector globally has been launched as a collaboration between K-CEP, Cool Coalition, Carbon Trust and COP26 High-Level Champions. This project supports the work of the UNFCCC Marrakech Partnership for Global Climate Action and in particular the Climate Action Pathways. These outline the longer-term vision for a 1.5-degree climate-resilient world from the perspective of non-Party stakeholders, and sets out actions needed to achieve that future.

Early insights from the project and an overview of plans and opportunities to engage through a Zero Pathways Cool Coalition working group were presented in this webinar, which took place on June 25th, 2020. The webinar provided an opportunity to feedback on the research and share recommended thoughts and actions to feed into the pathway.

Report of the Session

Opening: <u>Lily Riahi, Coordinator of the Cool Coalition</u> delivered opening statements on the need for ambitious action on cooling to achieve both climate and sustainable development goals. She called for a rapid transition to ensure access to cooling for all while reducing related emissions. These already produce 10% of global emissions, and are growing rapidly: by 2050, space cooling demand will triple and consume as much energy as China and India today, Riahi noted.

A range of approaches and actors are needed to solve the cooling challenge. Solutions are multifold, and include a shift to renewable power sourcing, a reduction of mechanical cooling needs, increasing energy and refrigerant efficiency across all sectors, as well as the developing innovative solutions, such as not-in-kind technologies, district cooling for urban settings, and nature-based solutions. The Cool Coalition aims at setting the stage for a transition to zero emission from cooling by brokering research and collaboration with partners, she concluded.









Overview of Zero pathway process: <u>Dan Hamza-Goodacre</u>, <u>Non-Executive Director of K-CEP and part of the COP26 Champions team</u>, provided an overview of the process that will ensure the creation of a zero-emission pathway for cooling.

He explained how this project is part of a campaign led by the High-Level Climate Champions to secure non-state actors' net-zero commitments. It builds on the COP25 Climate Ambition Alliance and is part of the preparation towards COP26, which will take place at the end of 2021. The "Race to Zero", an ambition aggregator and escalator, has already been joined by a vast number of stakeholders, covering half of the global GDP, said Hamza-Goodacre, before inviting others to join the race.

For cooling, the need for clear data on reduction potentials, solutions mapping and options for mitigation or emission offset led to the launch of the Pathway To Zero for Cooling by KCEP and Carbon Trust. This project which will be supported through a Cool Coalition working group, and is set to be published in October. The finalization of the pathway will allow for further engagement in November during the mobilization that will replace the postponed COP, concluded Hamza-Goodacre.

Cooling and the Marrakech Partnership for Global Climate Action: Niclas Svenningsen, Manager of Global Climate Action at the UNFCCC, outlined how, with global warming and higher temperatures, cooling is fundamental for thermal comfort but at the same time increasingly contributes to GHG emissions. To meet the challenge of climate change, under the UNFCCC, countries came together to define shared goals under the Paris Agreement. They also started defining ways to operationalize the Agreement, collected in the Paris rulebook and set to be finalized by the next COP.

Svenningsen highlighted that, while it is countries that signed the Agreement, non-state actors (NSA) are equally fundamental to deliver on the targets, which is why the UNFCCC seeks to catalyze and facilitate their engagement in the implementation phase. This, he explained, led to the creation of the Marrakesh Partnership, which engages NSAs under different thematic areas.

This collaboration, led by High-Level Climate Champions, helped create science-based Climate Action Pathways. Pathways include recommended actions on different levels, mainly advocating to use existing technologies and investments to promote sustainable and climate-friendly solutions, he noted. The pathways are currently under improvement and seek to mainstream the need to ensure a green and healthy recovery from the current crisis. The latter, together with the ongoing NDC update, is an opportunity to speed up change and strengthen action through inclusive multilateralism, including for the cooling sector, concluded Svenningsen.









Pathway research and way forward: <u>David Aitken</u>, <u>Director</u>, <u>Innovation at the Carbon Trust</u>, explained the planned research steps to study how the cooling sector as a whole can get to zero GHG emissions by 2050, what the key gaps are, and who needs to do what. The goal is to provide a backdrop/blueprint for action to achieve net-zero emissions for cooling in support of related pathways.

Aitken explained the building blocks for a robust pathway for the cooling sector, which are: the definition of the scope and boundaries of the sector, the establishment of an outlook as a counterfactual, the identification of mitigation strategies and key actors that can drive change. Aitken also clarified that this process builds on existing work, including the Cool Coalition hierarchy (Reduce –Shift – Improve – Protect – Leverage) and cooling forecasts from IEA, EIU and others, and is open to feedback and discussion from all stakeholders.

He, together with Hamza-Goodacre, explained that this work will result in the provision of a vision how we move forward, rather than a single pathway, to make the pathway implementable on different levels and contexts through a set of technological and policy options, including by mainstreaming recovery considerations in the pathway.

Closing: Mark Radka, Chief of the Energy and Climate Branch of UNEP, delivered closing remarks, underscoring the need to work across silos, across pathways and sectors, to deliver a net-zero emission future and tackle the climate crisis effectively. "Getting cooling right is an imperative in the climate context. Much can be done, much needs to be done, and what we really need to do is get on doing it".